United States Environmental Protection Agency
Division of Environmental Science and Assessment
2890 Woodbridge Ave
Edison, NJ 08837

The New York Bight Floatables Action Plan

Partnership in the Abatement of Floatable Debris

May 2013

Prepared By:
Helen Grebe, Regional Coastal Monitoring Coordinator
Monitoring Operation Section

Approved By:
John S. Kushwara, Chief
Monitoring and Assessment Branch

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1.0 Introduction

In response to the impacts of floatable debris washing up on New York and New Jersey recreational bathing beaches, the Short-Term Action Plan for Addressing Floatable Debris in the New York Bight was developed in 1989 and updated in May 2008. This document updates and replaces the 2008 short-term action plan and defines Federal, State and local agency's roles and responsibilities towards addressing floatable debris in the New York Bight for the next 5 year period. Periodic reviews, evaluations and modification of this plan will occur during this 5 year period. The New York Bight includes the New York/New Jersey Harbor Complex and the shorelines of Long Island and New Jersey.

Interagency partners from Federal, State and local agencies included in this plan are: the U.S. Environmental Protection Agency (EPA), U.S. Army Corps of Engineers (ACOE), National Oceanic and Atmospheric Association (NOAA), U.S. Coast Guard (USCG), New Jersey Department of Environmental Protection (NJDEP), New York State Department of Health (NYSDOH), New York City Department of Environmental Protection (NYCDEP), the Passaic Valley Sewage Commission (PVSC) and the Interstate Environmental Commission (IEC).

The primary objects of this plan are to define the roles and responsibilities:

- for surveillance of the New York/New Jersey Harbor Complex, and the New Jersey shore for floatable debris;
- for communication of an effective cleanup of floatable debris observed in the Harbor Complex, and;
- for the effective communication and notification of State and local authorities of impending debris washups.

2.0 Background

Floatable debris consists of a wide assortment of plastic, wood, paper, glass, rubber, metal and organic waste materials that float or are suspended in the water column and may eventually be deposited on shorelines and beaches. Floatable debris originating from street litter, combined sewer overflow (CSO) discharges, storm water discharges, decaying shoreline structures, pleasure boaters, and littering beach goers, can harm the marine environment and cause area beaches to close.

Through surveillance, communication and clean up efforts, we intend to improve water quality, protect the marine environment, eliminate navigational hazards, and prevent the occurrence of

beach closures due to floatable debris. Specifically, the main goals of this partnership consist of the following:

- Elimination of floatable debris escaping the New York/New Jersey Harbor Complex.
- Maintaining an effective communication network to coordinate floatable debris removal activities and to respond to observed slicks.
- Elimination of the adverse impact of floatable debris on the marine environment.
- Ensuring timely notification of beach operators concerning potential washups of floatable debris.
- Elimination of beach closures due to floatable debris.

The following sections will describe the surveillance and cleanup activities agreed upon by the interagency partners. Communication being an integral part of the plan will be discussed throughout.

3.0 Surveillance

The primary objective of the surveillance plan is to detect floatable debris early enough to allow effective cleanup, thereby eliminating their impact. Surveillance will be implemented during the critical beach season, approximately one week before Memorial Day through Labor Day.

3.1 EPA Surveillance of the New York/New Jersey Harbor Complex

Most floatable debris slicks that can impact the shores of New York and New Jersey are known to originate in the New York/New Jersey Harbor Complex. In order to effectively mitigate floatable debris slicks, surveillance will focus as close as possible to the point of origin, the Harbor Complex. Within the context of this action plan we have defined the New York/ New Jersey Harbor Complex to include the Arthur Kill, Newark Bay, the Kill Van Kull, the Upper and Lower New York Harbor, the lower Hudson River, and the coastline of Coney Island.

EPA will provide aerial surveillance of the Harbor Complex daily, except Sundays throughout the critical beach season. NJDEP will fly on Sunday into Raritan Bay to ensure seven day a week coverage.

During the EPA surveillance, the date, the time, and the name of the waterbody will be recorded in a field log book. If nothing significant is observed, the observer will write “clear”. If a significant slick is observed the following additional information will be recorded:

- the location of the debris including buoy numbers and landmarks,
- the latitude and longitude,
- the type of debris observed,
- the approximate width and length of the slick,

- the concentration of the slick, and
- the direction of the tide, if known.

All flights are weather dependent, and will be conducted as early in the morning as possible to assure prompt and early notification for effective cleanup.

3.11 Definitions

As in the 1989 Short-Term Action Plan for Addressing Floatable Debris, a significant "slick" is defined as an aggregation of floatable debris of indefinite width and a minimum length of approximately 400 meters. This definition has been adopted for practical purposes, it is difficult to detect and maintain a sighting for a smaller aggregation of floating debris from the air.

Concentration of a slick can be defined as heavy, moderate or light. A heavy density slick forms a continuous mat, very little if any water is visible because the material is packed so close together. Heavy density slicks contain a great deal of wood and garbage. A moderate density slick forms a mat with water visible through breaks in the mat. A light density slick is defined as material loosely floating together becoming dispersed and spread out.

3.12 Communication and Reporting

Once the information is recorded, Monday through Friday, the ACOE dispatcher will be immediately notified using a cell phone. On Saturday and Sunday, the operating vessel will be contacted directly via cell phone. The time the ACOE was notified will be recorded in the EPA field logbook. Section 6.0 contains a complete list of telephone numbers and contacts for floatable coordinators. This list will be updated yearly.

EPA will summarize observations in a weekly report and conduct trend analysis in a yearly report. The yearly report will be posted on the following web site: http://www.epa.gov/region02/water/action_plan/index.html.

3.2 NJDEP Surveillance of the New Jersey Shoreline and Harbor Complex

The NJDEP administers the Cooperative Coastal Monitoring Program (CCMP) with the New Jersey Department of Health and local environmental health agencies. As part of this program throughout the critical beach season, NJDEP will provide aerial surveillance from Raritan Bay south to Barnegat Light four days a week, and from Raritan Bay to Cape May Point, two days a week.

Starting in 2008, NJDEP extended their Sunday flight into the Arthur Kill, Newark Bay, Kill Van Kull and up the Hudson River as far as the George Washington Bridge. This flight area is covered by EPA from Monday through Saturday and will be covered by NJDEP on Sunday to provide 7 day/week surveillance of the Harbor Complex.

Weather, sea conditions if notable, discoloration of water, and location of significant floatable debris will be recorded in field logbooks.

3.21 Definitions

Significant floatables along the New Jersey coast are rare and are defined differently than those spotted in the New York/ New Jersey Harbor Complex. They are defined as a concentrated amount of trash 10 feet in length or longer.

3.22 Communication and Reporting

If floatables (as defined by section 3.21), are observed along the coast, upon completion of the flight, NJDEP will notify the appropriate county health department. The county health department will then notify the local beach manager. Local beach managers have the responsibility to ensure cleanup as appropriate.

If a significant slick (as defined by section 3.11), is observed in the NY/NJ Harbor complex, upon completion of the flight, NJDEP will notify the ACOE operating vessel directly.

Updates of daily beach conditions are posted on the NJDEP beaches web page: http://www.njbeaches.org.

3.3 Other Surveillance

The NY/NJ Harbor area is a heavily traveled area with a substantial marine community. Most vessels are equipped with a VHF marine radio and maintain a watch on channel 16 (156.800 MHz), the international calling and distress channel. Navigational hazards and marine debris are reported to the USCG using this channel. The USCG communicates all reports of navigational hazards and marine debris directly to the ACOE.

4.0 Cleanup within the Harbor Complex

Cleanup operations within the Harbor Complex will be conducted by specially equipped drift vessels.

4.1 ACOE

The ACOE will provide three drift vessels equipped with specially designed nets to be used on a routine basis and to respond when slicks are reported. Vessels, equipped with a net, will operate on a rotating basis seven days a week with one to three vessels operating on any given day throughout the critical summer season.

4.11 Communication and Reporting

All slick sighting within the Harbor Complex will be communicated to the ACOE on a real time basis, see Figure 1: Communication Chart for Reporting and Responding to Floatable Debris Slicks. The ACOE will deploy one of their vessels.

If a slick is not reached for efficient cleanup, the ACOE will supply feedback to the EPA Floatables Coordinator. EPA will investigate and contact NOAA if appropriate. If the slick has a potential to wash up on a local beach, NOAA will run a floatables tracking model. NOAA's tracking model will include the best possible real-time weather, tide, current observations and other oceanographic data, with a standard to provide a first forecast response within 30 minutes of a request. Once the model is run, the EPA Floatables Coordinator will contact the NJDEP CCMP Coordinator or the appropriate NY County Health Department. Results of the tracking model will also be forwarded to the ACOE.

Documentation of slick cleanup will be maintained by the ACOE in an electronic tracking sheet, see Figure 2: Army Corps of Engineers (ACOE) Tracking Sheet for Reported Floatable Slicks.

The ACOE will record the weight of all floatable debris collected and supply this information to the EPA Floatables Coordinator on a yearly basis for inclusion into the yearly report.

5.0 Collection Programs Surrounding the Harbor Complex

In addition to the surveillance and cleanup programs discussed above, the following section lists various floatable debris removal activities throughout New York and New Jersey.

5.1 Ocean Conservancy's International Coastal Cleanup

The Ocean Conservancy sponsors an Annual International Coastal Cleanup every September, coordinated throughout New York State by the American Littoral Society. Typically, 6,000 - 10,000 volunteers clean up and document the pounds of debris at over 300 sites across New York State. Participating counties include: Suffolk, Nassau, Queens, Kings, Richmond, Manhattan, Bronx, and Westchester. Website: http://www.alsnyc.org/cleanup.htm

The New Jersey Clean Communities Council (NJCCC), coordinates cleanup throughout New Jersey during the Ocean Conservancy's Annual International Coastal Cleanup. NJCCC expanded its Slam Dunk the Junk volunteer-based antilitter campaign by "adopting" (from the New Jersey Department of Environmental Protection) the popular "Adopt-a-Beach" waterway cleanup program. With new impetus and support revitalizing "Adopt-a-Beach," and the growing number of volunteers inquiring about cleaning New Jersey's waterways, NJCCC is uniquely positioned to leverage International Coastal Cleanup throughout the state.
Website: http://njclean.org/Adopt-a-Beach.html.

5.2 New York City Department of Environmental Protection (NYCDEP) Vessel, Booming and Skimming Collection Program

The 1992 CSO Abatement Order on Consent between the NYCDEP and New York State Department of Environmental Conservation (NYSDEC) required the NYCDEP to implement a short-term booming and skimming program to address floatables debris from approximately 50% of the City's CSO area. From 1994 – 2008, the NYCDEP operated a large open water skimmer vessel, the SV *Cormorant*, in the NY/NJ Harbor. Starting in 1995 and ongoing, four smaller skimming vessels are used in Jamaica Bay, the East River, Newtown Creek, Buttermilk Channel,

Flushing Bay and Bowery Bay. Website:
http://www.nyc.gov/html/dep/html/harborwater/float.shtml#boom

5.3 New Rochelle, NY Boom Floatable Debris Collection System

In 1998, the City of New Rochelle, under a NYSDEC grant, installed a "Stream Floatables Debris Collection System" at the Stephenson Brook stormwater drainage area outfall, which empties into Echo Bay and Long Island Sound. The system has a holding capacity of 1 cubic yard of debris. Collected debris includes wood, paper, glass, metal, plastics and organics. During super storm Sandy, this collection system was destroyed. The city has applied for FEMA funds to replace the system.

5.4 NJDEP's Clean Shores Program

Beginning in 1989, NJDEP began a program called "Operation Clean Shores", designed to collect shoreline floatable debris before it became resuspended due to tidal influences. This program uses New Jersey inmates to collect floatable debris, comprised mainly of trash and landed drift wood, on non-recreational shorelines in order to prevent floatable debris from being re-floated during extreme high tides and washing up on recreational beaches, and/or becoming hazards to navigation and impacting marine life. The program, now called "Clean Shores", is conducted throughout the State of New Jersey in the Hudson, Raritan and Delaware estuaries and barrier island bays. In 1993, the Clean Shores Program was put into service on a year-round basis, whereas formerly it was only implemented during the bathing season. NJDEP's Clean Shores Program is funded by the sale of Shore Protection license plates. Website:
http://www.state.nj.us/dep/bmw/CleanShores/CSmain.html

5.5 Passaic Valley Sewerage Commissioners (PVSC) Skimmer Vessel Collection and Restoration Program

Beginning in 1998, PVSC established a program to aid in removing trash along the banks of the Passaic River. The program provides coordination and support to municipalities, counties, citizens, service groups, and local businesses to conduct shoreline cleanups along the river and in their communities. In addition to the sponsorship of voluntary efforts, PVSC has implemented an extensive cleanup of the river's shoreline by creating a River Restoration Department dedicated to the removal of trash and debris from the Passaic River and Newark Bay. PVSC operates two skimmer vessels, the SV *Newark Bay*, and the SV *Passaic Valley* which are used on the Passaic River. Website: http://www.nj.gov/pvsc/

5.6 Floatables Abatement Programs of New Jersey Communities

Using General Permit conditions, NJDEP requires municipalities with combined sewer systems to construct control measures which will capture and remove solids and floatables through a bar screen having a bar spacing of 0.5 inches. Twelve New Jersey Communities participate in this program to decrease the amount of solids/floatables in the New Jersey area.

6.0 Contact list: **Floatable Coordinators Contact List**

United States Environmental Protection Agency
Helen Grebe (732) 321-6797, home (732) 714-7017, cell (732) 278-1435
Randy Braun (732) 321-6692 , home (732) 254-2628, cell (732) 407-1023
John Kushwara (732) 321-6685, home (732) 671-2506, cell (908) 420-1959
DESA Helicopter Cell Phone: (908) 420-4464
EPA National Response Center 1-800-424-8802 - 24 hours

United States Army Corps Of Engineers (for In-Harbor Slicks) 212-264-7147 fax
Marine Dispatch: Ray Drayton (201) 333-1170 – 24 hours
William Lyness (201) 333-1170, (201) 309-2360, cell (201) 912-7701
Walter Scott (201) 333-1170, cell (973) 570-4166
Hayward: (917) 567-9062 *Driftmaster*: (917) 567-9063 *Gelberman*: (917) 567- 9067

United States Coast Guard (oil slicks)
National Response Center 1-800-424-8802 (24-Hour Hotline)
Pollution Response Center (718) 354-4356

National Oceanic and Atmospheric Administration (Trajectory Model Run / Major Slicks)
Ed Levine (212) 668-6428 [212-668-6370 fax]
Glen Watabayashi (206) 526-6324 [206-526-6329 fax]
Main Office (206) 526-4911 (24-hour Hotline)

New Jersey Department of Environmental Protection
CCMP Coordinator: Virginia Loftin work (609) 984-5599 [609-292-1803 fax]
NJDEP Environmental Hot Line 1-877-927-6337
Public Beach Information 1-800-648-SAND

New York Health Departments
NYC Health Department – Chris Boyd (212) 442-5222 (212) 676-1520
Nassau County Health Department – John Jacobs (516) 571-2930 or Mark Rothstein
Suffolk County Health Department – Mike Jensen (631) 852-5760

New York City Department of Environmental Protection
Walter Goyzueta, (718) 595-4925
Kevin Byrnes (212) 860-9553

PVSC Skimmer Vessel (Passaic River)
Brian Davenport (973) 817-8332 cell (973) 277-8890
John Doran (973) 583-2433.

Figure 1. Communication Chart for Reporting and Responding to Floatable Debris Slicks

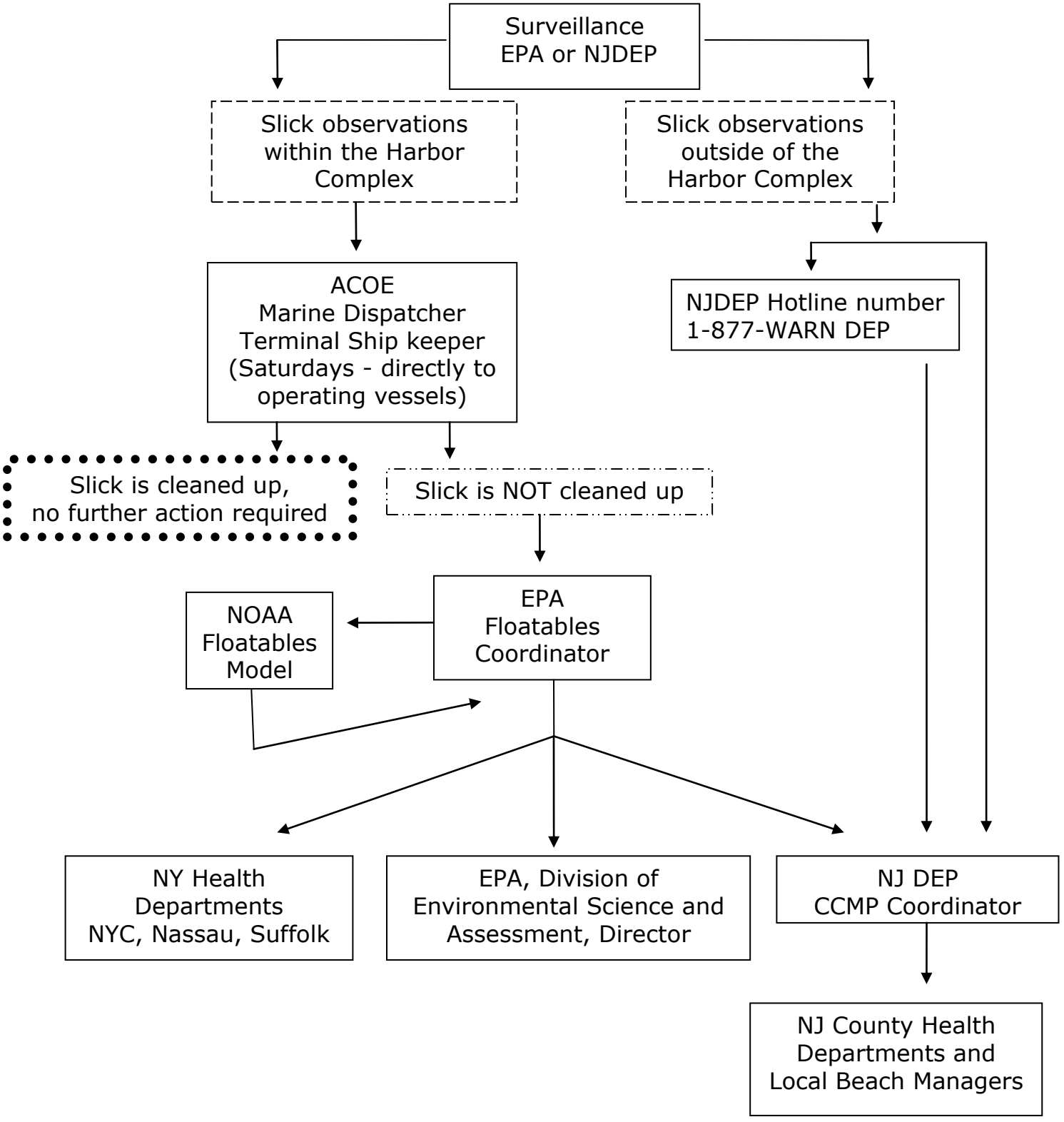

Figure 2. Army Corps of Engineers (ACOE) Tracking Sheet for Reported Floatable Slicks

Army Corp of Engineers (ACOE) Tracking Sheet for Reported Floatables Slicks								
Date	Time	Waterbody	Approximate Size of Observed Slick	Name of Responding Ship	Responding Ship Has Net (yes or no)	Ship Found the Slick and Conducted Cleanup (if yes, no further action is needed)	Further Action Taken (ACOE contacts EPA,EPA investigates, contacts NOAA if appropriate and then contacts ACOE for follow up)	Comments